In re Patent Application of:
ROY
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In the Claims:

1.   (CURRENTLY AMENDED)   A communications system comprising:

a database for storing problem magnitudes relating to failed attempts at accessing servers using connection engines; and

an intelligent routing engine operative with the database for querying the database and delaying any further attempts at accessing the server when the problem magnitude <u>as a preset rate of decay</u> exceeds a predetermined threshold.

2.   (ORIGINAL)   A communications system according to Claim 1, wherein said intelligent routing engine is operative for delaying any reattempts at accessing a server until a problem magnitude returns to below a predetermined threshold.

3.   (ORIGINAL)   A communications system according to Claim 2, wherein any delay in reattempting access to the server is a function of a preset rate of decay of a problem magnitude.

4.   (ORIGINAL)   A communications system according to Claim 1, wherein said database includes data relating to a current problem magnitude for a failed access to a server that is added to a current exponentially decayed entry in the database.

5.   (ORIGINAL)   A communications system according to Claim 1, wherein said database includes data relating to a

problem magnitude versus time for any server and connection engine pair.

6.   (ORIGINAL)   A communications system according to Claim 1, wherein a problem magnitude is assigned for an error based on network failures.

7.   (ORIGINAL)   A communications system according to Claim 1, wherein a problem magnitude is assigned for an error based on failures unrelated to a network failure.

8.   (ORIGINAL)   A communications system according to Claim 7, wherein any failures unrelated to a network failure include an incorrect password and/or poorly formed request.

9.   (ORIGINAL)   A communications system according to Claim 1, wherein said intelligent routing engine comprises a proxy server.

10.   (ORIGINAL)   A communications system according to Claim 1, wherein said intelligent routing engine is operative for accessing a server using a POP, IMAP or httpmail protocol.

11.   (CURRENTLY AMENDED)   A communications system comprising:
    a plurality of connection engines that can be used by a client for accessing a server of a server on an Internet Protocol (IP) network, wherein said connection engines are distributed among a plurality of subnets and/or IP addresses;

a database for storing a problem magnitude versus time
relating to a particular connection engine and server after
attempts had been made to access servers using the connection
engines and problem magnitudes <u>as a preset rate of decay</u> had
been assigned to failures in accessing the servers; and

an intelligent routing engine operative with the database
for selecting a connection engine with minimum problems when a
particular server is to be accessed based on stored data
within the database.

12. (ORIGINAL) A communications system according to
Claim 11, wherein said intelligent routing engine is operative
for delaying any reattempts at accessing a server until a
problem magnitude returns to below a predetermined threshold.

13. (ORIGINAL) A communications system according to
Claim 12, wherein any delay in reattempting access to a server
is a function of a preset rate of decay of a problem
magnitude.

14. (ORIGINAL) A communications system according to
Claim 11, wherein said database includes data relating to a
current problem magnitude for a failed access to a server that
is added to a current exponentially decayed entry in the
database.

15. (ORIGINAL) A communications system according to
Claim 11, wherein said database includes data relating to a
problem magnitude versus time for any server and connection
engine pair.

16.   (ORIGINAL)   A communications system according to Claim 11, wherein a problem magnitude is assigned for an error based on network failures.

17.   (ORIGINAL)   A communications system according to Claim 11, wherein a problem magnitude is assigned for an error based on failures unrelated to a network failure.

18.   (ORIGINAL)   A communications system according to Claim 17, wherein any failures unrelated to a network failure include an incorrect password and/or poorly formed request.

19.   (ORIGINAL)   A communications system according to Claim 11, wherein said intelligent routing engine comprises a proxy server.

20.   (ORIGINAL)   A communications system according to Claim 11, wherein said intelligent routing engine is operative for accessing the server using POP, IMAP or httpmail protocol.

21.   (CURRENTLY AMENDED)   A method of accessing a server of a server on an Internet Protocol (IP) network comprising the steps of:
        attempting access to a server using a first connection engine;
        assigning a problem magnitude if the attempt at accessing the server has failed; and

delaying any further attempts at accessing the server when the problem magnitude <u>as a preset rate of decay</u> exceeds a predetermined threshold.

22.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of delaying any reattempts at accessing the server until the problem magnitude returns to below a predetermined threshold.

23.   (ORIGINAL)   A method according to Claim 22, wherein the delay in reattempting access to the server is a function of a preset rate of decay of the problem magnitude.

24.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of maintaining a database of failed attempts at accessing the server.

25.   (ORIGINAL)   A method according to Claim 24, wherein a current problem magnitude for a failed access to a server is added to a current exponentially decayed entry in the database along with a time stamp.

26.   (ORIGINAL)   A method according to Claim 24, and further comprising the step of storing in the database the problem magnitude versus time for any server and connection engine pair.

27.   (ORIGINAL)   A method according to Claim 24, and further comprising the step of tracking the magnitude of

failure based on the problem magnitude of failed attempts stored within the database.

28.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of assigning a problem magnitude for an error based on network failures.

29.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of assigning a problem magnitude for an error based on failures unrelated to a network failure.

30.   (ORIGINAL)   A method according to Claim 29, wherein a failure unrelated to a network failure includes an incorrect password and/or poorly formed request.

31.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of making a service request to the connection engine using a proxy engine.

32.   (ORIGINAL)   A method according to Claim 31, and further comprising the step of making a service request using a Wireless Application Protocol (WAP) or Simple Mail Transfer Protocol (SMTP).

33.   (ORIGINAL)   A method according to Claim 31, and further comprising the step of attempting access to a server using a POP, IMAP, or httpmail protocol.

34.   (ORIGINAL)   A method according to Claim 21, and further comprising the step of choosing a second connection

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engine and attempting access to the server after failing access with the first connection engine.

35.   (CURRENTLY AMENDED)   A method of accessing a server of a server on an Internet Protocol (IP) network comprising the steps of:

distributing connection engines over multiple subnets and/or multiple IP addresses;

attempting access to servers using the connection engines;

assigning problem magnitudes to failures in accessing any servers;

storing the problem magnitude versus time <u>as a preset rate of decay</u> relating to a particular connection engine and server within a database; and

choosing a connection engine having minimum problems when a particular server is to be accessed based on the data stored within the database.

36.   (ORIGINAL)   A method according to Claim 35, and further comprising the step of distributing the connection engines over multiple servers.

37.   (ORIGINAL)   A method according to Claim 35, wherein a current problem magnitude for a failed access to a server is added to a current exponentially decayed entry in the database along with a time stamp.

38.   (ORIGINAL)   A method according to Claim 35, and further comprising the step of terminating any further

attempts at accessing a server using a first connection engine if a problem magnitude exceeds a predetermined threshold.

39. (ORIGINAL) A method according to Claim 38, and further comprising the step of delaying any reattempts at accessing the server until a problem magnitude returns to below a predetermined threshold.

40. (ORIGINAL) A method according to Claim 39, wherein the delay in reattempting access to the server is a function of a preset rate of decay of the problem magnitude.

41. (ORIGINAL) A method according to Claim 35, and further comprising the step of assigning a problem magnitude for an error based on network failures.

42. (ORIGINAL) A method according to Claim 35, and further comprising the step of assigning a problem magnitude for an error based on failures unrelated to a network failure.

43. (ORIGINAL) A method according to Claim 42, wherein a failure unrelated to a network failure includes an incorrect password and/or poorly formed request.

44. (ORIGINAL) A method according to Claim 35, and further comprising the step of making a service request to a connection engine using a proxy engine.

45. (ORIGINAL) A method according to Claim 44, and further comprising the step of making a service request using

a Wireless Application Protocol (WAP) or Simple Mail Transfer
Protocol (SMTP).

46.   (ORIGINAL)   A method according to Claim 44, and
further comprising the step of attempting access to the server
using POP, IMAP, or httpmail protocol.

47.   (ORIGINAL)   A method according to Claim 35, and
further comprising the step of choosing a second connection
engine and attempting access to the server after attempting
access to the server with the first connection engine has
failed.

Please add new claims 48-52 as follows:

48.   (NEW)   A communications system comprising:
a database for storing problem magnitudes relating to
failed attempts at accessing servers using connection engines;
and
an intelligent routing engine operative with the database
for querying the database and delaying any further attempts at
accessing the server when the problem magnitude exceeds a
predetermined threshold, wherein said intelligent routing
engine is operative for delaying any reattempts at accessing a
server until a problem magnitude returns to below a
predetermined threshold as a function of a preset rate of
decay.

49. (NEW) A communications system comprising:

a database for storing problem magnitudes relating to failed attempts at accessing servers using connection engines; and

an intelligent routing engine operative with the database for querying the database and delaying any further attempts at accessing the server when the problem magnitude exceeds a predetermined threshold, and wherein said database includes data relating to a current problem magnitude for a failed access to a server that is added to a current exponentially decayed entry in the database.

50. (NEW) A communications system comprising:

a database for storing problem magnitudes relating to failed attempts at accessing servers using connection engines; and

an intelligent routing engine operative with the database for querying the database and delaying any further attempts at accessing the server when the problem magnitude exceeds a predetermined threshold., where a problem magnitude is assigned for an error based on failures unrelated to a network failure.

51. (NEW) A communications system comprising:

a database for storing problem magnitudes relating to failed attempts at accessing servers using connection engines; and

an intelligent routing engine as a proxy server operative with the database for querying the database and delaying any

further attempts at accessing the server when the problem magnitude exceeds a predetermined threshold.

52. (NEW) A method of accessing a server of a server on an Internet Protocol (IP) network comprising the steps of:

attempting access to a server using a first connection engine;

assigning a problem magnitude if the attempt at accessing the server has failed;

delaying any further attempts at accessing the server when the problem magnitude exceeds a predetermined threshold; and

choosing a second connection engine and attempting access to the server after failing access with the first connection engine.